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ABSTRACT

A study was conducted to address whether in-service teacher utilization training leads to better use of educational television by teachers and whether teacher-led activities supporting telelessons impact on student learning. Past studies show conflicting results and suggest inadequate teacher preparation as a cause. Four television programs on safety were given to eight third-grade classes, with four teachers receiving television utilization training (experimental group) and four teachers getting no training (control group). Training consisted of two one-hour sessions involving visual literacy, basic utilization methods, project information, program previews, and fantasy ideas. Pre- and post-tests on telelesson objectives were administered to students, and teachers completed questionnaires on the nature and extent of classroom activities supporting the telelessons. In addition, teachers in the experimental group completed evaluations on the utilization training. It was found that (1) telelessons significantly impacted on student learning for all classes, (2) there was a trend toward greater achievement in experimental classes, and (3) the nature of classroom activities was related to student achievement, but sheer number was not. Instruments used in the study are appended. (BK)

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TELEVISION AND UTILIZATION TRAINING: HOW DO THEY INFLUENCE LEARNING?

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EXECUTIVE SUMMARY

The aim of this study was to determine the impact of in-service sessions conducted by the Nebraska Department of Education Television Utilization Consultant on teacher usage of television resources and student achievement. The research also dealt with the effect of specific television programs and supplementary activities on learning. The television resources involved were the four safety programs for grade three developed by the Nebraska Department of Education.

Pre-tests covering the educational objectives of the programs were administered to eight third grade classes, representing 155 students, in Grand Island, Nebraska. Teachers of four of the classes received program-related, in-service training (experimental group); the remaining four teachers did not have the benefit of such training (control group). All eight classes viewed the television programs and participated in any additional support activities as planned by their teacher. Following viewing of the television programs, all students were administered a post-test. In addition, teachers completed a questionnaire designed to determine the nature and extent of supplementary classroom activities.

The results of this study are discussed in terms of the research questions:

1. Does the television package (television programs and teacher-led activities) promote student achievement?

Results showed that the telelesson package for the four safety programs developed by the Nebraska Department of Education had a highly significant impact on student learning ($p < .0001$). This result was obtained by comparing students' pre and post-test scores. It is important to point out that student increases from pre to post-testing held regardless of whether or not the teacher had received

in-service training and regardless of the number of follow-up activities used. Students whose teachers had not participated in the in-service sessions still made significant achievement gains. Likewise, scores of students under teachers who had used few support activities also increased from pre to post.

This finding is in line with previous research showing that children do learn from instructional television. This fact has been demonstrated in hundreds of studies conducted in a variety of settings and with a variety of curriculums. Several authors have reviewed this research (Chu & Schramm, 1967; Jamison, et al., 1974; Moldstad, 1974) all concluding that children can learn efficiently from this medium.

2. Do in-depth teacher in-service sessions conducted by a television utilization consultant result in more effective classroom instruction and greater student learning?

While viewing the television programs and participating in teacher-planned pre- and post-activities increased student learning, there was a trend towards greater achievement gains with the addition of teacher utilization training. Classes whose teachers participated in the in-service sessions scored higher on the instruction-based test than classes whose teachers had not had such training. The fact that this difference closely approached statistical significance ($p = .052$) points to the impact of utilization training. An examination of the types of utilization activities used by control and experimental teachers revealed several differences. Although all teachers were provided with teacher manuals, the experimental teachers made greater use of this print resource. Experimental teachers more often prepared their students for television viewing and followed up the program with support activities. Post-program

discussions were generally longer in experimental classes. While control teachers tended to concentrate utilization solely on post-program discussions, experimental teachers used a variety of support activities, drawing upon suggestions from the teacher's manual, the in-service workshop, and planning activities of their own. No control teacher used additional media resources, while experimental teachers used leaflets, posters, and film to provide further learning experiences for their students. Because of the differences in activities used by the experimental versus control teachers, it appears that higher quality utilization was promoted by the in-service training.

The experimental group conducted 60% more utilization activities than the control group. The statistical comparison of the number of activities used by the two groups was insignificant, however. Even though there was a large difference, the small number of subjects (N=8) made significance difficult to achieve.

3. Can student achievement be promoted by increasing the number of support activities conducted?

The sheer number of utilization activities conducted does not appear to be related to student achievement. Classes were ranked according to the number of teacher-led activities used, and the top and bottom three classes were identified. A comparison of high teacher utilization activity classes versus low activity classes showed no significant student achievement difference between the two groups. It should be pointed out, however, that the number of activities conducted is not necessarily indicative of quality utilization. Differences in the nature of activities used by the experimental versus the control teachers suggests that higher quality utilization was promoted by the in-service training. Using this quality versus

quantity distinction, this study suggests that quality utilization is more likely to impact on student achievement.

TELEVISION AND UTILIZATION TRAINING: HOW DO THEY INFLUENCE LEARNING?

INTRODUCTION AND STATEMENT OF PURPOSE:

Television utilization has been a continuing concern for educational broadcasters. This concern has been evidenced by the commitment of ETV organizations to maintain a utilization staff to work with teachers and administrators to effect proper utilization of instructional television. Kentucky ETV with its eight utilization specialists, Mississippi ETV with its five, and South Carolina with its seven represent this concern. As educational television has matured, so has the quality of utilization support. In the early days of ETV, utilization consultants were faced with the task of creating an awareness of ITV and introducing teachers to a new instructional resource with unique characteristics. Today, with the awareness of ITV established, utilization consultants are more concerned with working with teachers and administrators to effect a systematic approach to TV utilization. Today's emphasis is more on the integration of television with the total curriculum, capitalizing on the qualities of television and support teacher activities that make for maximum learning.

Despite the commitment of ETV organizations to TV utilization, few studies have attempted to assess the quality of television utilization in the schools and its impact on student achievement. Most utilization studies are surveys of television usage, reporting numbers of students and teachers viewing particular series. While such surveys are valuable in their own right, there is a need for research going beyond the typical "head count" and focusing on the impact of utilization activities on student achievement. Does the in-service work of a utilization consultant lead to better television utilization by teachers and do such teacher-led activities have an impact on student learning? This study was directed at answering these questions.

REVIEW OF LITERATURE:

Because this study deals with health education for grades 3-4, the literature review was limited to research with elementary students.

One of the most broadly based studies attempting to isolate the effect of utilization activities was conducted in conjunction with the BREAD AND BUTTERFLIES series (Flaughner & Knapp, 1974). BREAD AND BUTTERFLIES, a career development project for nine-to-twelve-year-olds, was developed and produced by the Agency for Instructional Television and evaluated by the Educational Testing Service. A number of the programs were designed in such a way that if the educational goals were to be achieved, the burden would be on the teachers' activities following the program. Using the educational objectives as a standard, evaluators examined the specific effects of the classroom activities which followed the viewing of the programs. The investigation was limited to the first fifteen minutes of the post-program activities. The results of the analysis indicated no significant changes in student performance attributable to the utilization activities. One of the possible reasons the evaluators cite for this result is the use of inappropriate teacher activities through lack of preparation. This suggested explanation provides support for this study which aims to assess the impact of teacher activities prepared in conjunction with a utilization consultant.

Another utilization study was conducted with PROJECT SURVIVAL, a nationally distributed map and globe series for intermediate students. This study assessed the achievement difference between students exposed to the telelesson package (which included pre- and post-telelesson activities), those viewing the TV programs only, and a control group receiving the traditional curricular approach as utilized by the classroom teacher (Cooper and Kazelskis, 1971). The telelesson package produced higher achievement scores than the television alone, which in turn resulted in higher scores than the control group. The only difference of statistical significance, however, was between the telelesson package and the control group.

Similar results were obtained in research conducted with PROJECT FREESTYLE, a television and print package intended to combat sex-role stereotyping by nine

to twelve-year-old children in career-related knowledge, attitudes, and behavior. Results showed that the addition of student print materials, a teacher guide, and in-service training of the teachers failed to augment any of the effects of the television programs alone (Williams, La Rose, Smith, Frost, and Eastman, 1977).

Other research pointing to the limited effectiveness of television utilization activities in increasing student achievement comes from Garry (1961). He found that teacher training in television utilization did not make a difference in student learning. Also, teachers who used a brief outline of the TV programs and suggestions for pupil projects achieved as much with their classes as teachers with a comprehensive study guide.

The BREAD AND BUTTERFLIES , PROJECT SURVIVAL, and FREESTYLE studies showed that utilization activities did not produce significant achievement gains beyond those gained by showing the television program alone. Conflicting results were found in experiments conducted during an extensive instructional television project in Denver. The project involved 6,000 elementary pupils in 192 Denver schools. The subject matter taught by television was Spanish. A comparison was made between students seeing only the fifteen-minute TV programs and those having an additional fifteen-minute teacher-directed follow-up (Hayman and Johnson, 1963). After one semester, test results showed the teacher-directed follow-up resulted in significantly higher achievement.

Chu and Schramm (1967) in their comprehensive review of the television research concluded that television is most effective as a tool for learning when used in a suitable context of learning activities at the receiving end. Although much of the research they cite in support of this conclusion was conducted with college students and the military, the Denver studies previously discussed and the Hagerstown experiments (Hagerstown, 1959) provide support for the importance of teacher-led activities to complement the televised instruction. Hagerstown, Maryland was one of the first and most comprehensive instructional television experiments. Television provided the core of the entire curriculum but the TV

lesson filled only 10 - 30 minutes of the class period. The rest of the time belonged to the classroom teacher and great efforts were made at TV - classroom teacher coordination. Their experience was that television coupled with supplementary activities resulted in significant learning.

In their 1974 revision Chu and Schramm added another utilization-related conclusion to their earlier findings: "Supplementary activities or related adult interaction will significantly increase the effectiveness of instructional television for preschool and early elementary aged children." Relying heavily on the research from SESAME STREET and CARRASCOLENDAS, a bilingual primary level series, they point out that television cannot be considered a complete instructional system in and of itself.

The conflicting results of the studies cited can perhaps be partially explained in relation to the results of the CARRASCOLENDAS research. Although this series' research revealed that supplementary activities generally enhanced learning (Williams, McRae, and Van Wart, 1972), there was a complex relationship between contextual variables (such as supplementary activities) and TV program variables (Stanford, 1973). A possible explanation is that the degree to which the television program itself achieves the intended objectives contributes to the effect of the supplementary activities. If the television program does not achieve the educational goals, as with BREAD AND BUTTERFLIES, the supplementary activities must carry more weight and more time and preparation should be devoted to their development.

It also appears that general training in television utilization is not effective in promoting student achievement in regard to specific television programs. In-service activities concentrating on effective utilization of particular series or programs would perhaps have more impact on student achievement.

In summary, the research dealing with the effects of television utilization activities is varied and contradictory. It appears, however, that such activities are valuable if they are carefully planned to support the television resource.

This study attempted to determine the effect of such preparation in developing classroom activities to achieve the intended educational objectives.

The primary questions to be answered by this study were the following:

- (1) Will in-service sessions led by a TV consultant result in more effective classroom instruction as measured by student achievement?
- (2) Will in-service sessions led by a TV consultant result in more effective teacher usage of television and more extensive classroom support activities?
- (3) Can student achievement be promoted by increasing the number of support activities conducted?

A post-hoc analysis was conducted to answer the following question:

- (1) Is there a difference between subjects' pre and post-test scores?

METHODOLOGY

Synopsis: Pre-tests covering the educational objectives of four safety television programs were administered to eight third grade classes. These four programs were from the HEALTH 3-4 series broadcast statewide by Nebraska ETV. All four programs were developed by the Nebraska Department of Education and produced by Nebraska ETV. Teachers of four of the classes received television in-service training (experimental group); the remaining four teachers did not have the benefit of such training (control group). All eight classes viewed the television programs and participated in any additional instructional activities as planned by their teacher. Following viewing of the television programs, all students were administered a post-test. In addition, teachers completed a questionnaire designed to determine the nature and extent of supplementary classroom activities.

Subjects: Subjects were 155 third grade students and their eight teachers from Grand Island, Nebraska. Teacher participation in the study was voluntary. From those teachers expressing interest, two groups of teachers were selected. An attempt was made to match the two groups in terms of age, marital status, etc. Although the two groups were similar in terms of age, teacher questionnaires administered at the end of the experiment showed that the control group consisted of more experienced teachers. The average years of teaching for the control group was fifteen, while the experimental group averaged nine years of teaching. The two groups were equal in terms of educational level and general experience with instructional television, however. Classes selected had not had a unit on safety this year, and the teachers had not participated in television in-service activities. Nevertheless, two of the experimental teachers had used the safety television programs last year, while none of the control teachers had previously worked with them.

Instrumentation: There were two instruments used in this study, an instruction-based test administered to the students and a teacher questionnaire. The student

test was designed to measure achievement of the TV objectives. It was developed from a table of specifications, which can be found in Appendix A. A pilot test of the quiz was made with a third grade class in Ceresco, Nebraska, to identify problems with the questions and test administration. An item analysis was conducted and internal consistency reliabilities were obtained from the pilot testing, and these findings guided test revision. Because it was discovered during the pilot testing that third graders have a tendency to share answers, two forms of the tests were developed. (See Appendix B.) Identical items were used on both tests, but the order of the questions differed.

The questionnaire aimed to determine the nature and extent of utilization activities used in the classroom (Appendix C). It also provided evaluative responses regarding the utilization workshops. In addition to eliciting basic teacher and utilization information, it listed the activities suggested for each program from the teacher manual. Teachers were asked to check activities they used, as well as to describe any additional learning experiences they conducted. The teacher form, coupled with teacher interviews, provided both quantitative and qualitative descriptions of utilization activities. The quantitative data was used for statistical analyses. The qualitative information was more subjective, providing insights as to the quality of the support activities.

Design:

Null Hypothesis 1: There is no significant difference in scores on a test based on television program objectives between classes whose teacher has had television in-service training and those classes whose teacher has not had the benefit of such training.

Independent Variable: TV utilization planning - In-depth television utilization planning was conducted for half the teachers involved in the study. The remaining teachers did not have the benefit of such assistance.

Dependent Variable: Student achievement - Individual scores were obtained from an instruction-based test designed to measure achievement of the TV objectives.

Design: A pre- and post-test was given to all eight classes, four classes whose teacher received in-service training and four who did not. Analysis of Covariance was used to determine achievement differences between the two groups.

Null Hypothesis 2: There is no significant difference in the number of instructional activities used to achieve identified educational objectives between teachers involved in television in-service activities and those who are not.

Independent Variable: TV utilization planning

Dependent Variable: Number of teacher activities - The number of activities each teacher used (in addition to the TV programs) to achieve the identified objectives was determined from the questionnaire administered following broadcast of all four television programs.

Design: Classes were divided into two groups:

- (1) Classes whose teacher received in-service training
- (2) Classes whose teacher did not receive training

A questionnaire was administered to all teachers to determine the nature and extent of utilization activities they conducted in the classroom. A "t" test compared the difference in the number of activities used by the two groups.

Null Hypothesis 3: There is no significant difference in scores on a test based on specific television objectives between students whose teachers use a large number of instructional activities and those using fewer instructional activities.

Independent Variable: Number of teacher activities - The number of activities each teacher used to achieve the identified objectives was determined from a teacher questionnaire. Classes were ranked according to the number of teacher-led activities, and the top and bottom three classes were identified. These two groups represented high teacher activity and

low teacher activity--the amount of support provided for the television programs.

Dependent Variable: Student achievement - Individual scores were obtained from an instruction-based test designed to measure achievement of the objectives of the four television programs.

Design: Classes were divided into two groups on the basis of the number of activities the teacher used to achieve the identified objectives. The three classes whose teachers used the greatest number of support activities comprised one group; the three classes whose teacher used the fewest number of support activities represented the second group. The group differences in student achievement were determined by using Analysis of Covariance procedures with the pre-test serving as the covariant.

PROCEDURES:

1. Prior to the statewide broadcast of the four safety television programs for grades 3-4, a pre-test was administered by the experimenter to all subjects. A pilot test of the quiz was run with a third grade class in Ceresco before it was administered in experimental classes.
2. The State Department of Education TV Consultant worked with four of the eight teachers involved in the study. The training consisted of two one-hour sessions held after school. The first session was conducted prior to the television broadcasts; the second was held at a time between broadcast of the second and third program. The in-service involved discussions of visual literacy, basic utilization methods, project information, program previews and fantasy ideas. The fantasy ideas consisted of pre-telelesson suggestions such as describing a situation and encouraging the children to imagine the scene and its consequences. Situations described were those to be depicted in the television program. A group input procedure was also used to allow participant discussion.

3. The remaining four teachers did not have the benefit of utilization assistance. They were, however, provided with a teacher manual for the series and a list of student objectives for the TV programs. They were requested to utilize the television programs and conduct utilization activities typically employed in their classroom.
4. The four programs from the safety unit of the Health series for grades three and four were broadcast on the Nebraska ETV Network on April 7, 14, 21, and 28.
5. Following these broadcasts, a post-test was administered by the experimenter to all subjects. In addition, teachers completed questionnaires to determine the nature and extent of their utilization activities.

RESULTS

A comparison was made between test scores of students whose teachers had television in-service training (experimental group) and those students whose teachers had not had the benefit of such training (control group). The results of the analysis of covariance statistical test showed that the difference closely approached significance at the generally accepted level of $p < .05$ ($F = 3.84$, $df\ 1/152$, $p = .052$).

Another comparison was made between the number of television utilization activities used by experimental teachers versus control teachers. Although the experimental group planned and conducted a larger number of supplementary activities, this difference was not significant ($t = 1.269$, $df = 6$).

The third analysis aimed to determine if the number of follow-up teacher activities would impact on student achievement. Classes were ranked according to the number of teacher-led activities used, and the top and bottom three classes were identified. The high teacher activity group consisted of two experimental and one control teacher. The low activity group was composed of two control and one experimental teacher. The results of the analysis of covariance test showed no significant difference in student achievement between these two groups ($F = 1.200$, $df\ 2/115$, $p = .28$).

A summary table showing class pre- and post-test means and the number of teacher support activities conducted is presented in Table I. Results of the teacher workshop evaluations and complete tallies of responses to the teacher questionnaire can be found in Appendix C.

Table I

Class Pre- and Post-Test Means;
Number of Teacher Support Activities

Treatment	No. Teacher Activities Used	Pre-Test	Post-Test
<u>Control</u>			
Class 1	7	40.28*	46.24
Class 2	3	38.19	44.67
Class 3	15	41.00	49.00
Class 4	25	33.53	44.56
Control Group $\bar{X}$	12.5	38.94	46.08
<u>Experimental</u>			
Class 5	24	40.36	47.64
Class 6	22	39.80	47.70
Class 7	24	38.55	48.10
Class 8	10	37.35	47.60
Experimental $\bar{X}$	20	38.62	47.78

*Highest Possible Score = 60

Post-hoc Analysis: A post-hoc analysis was made to gain information on the impact of the television programs and their relationship to utilization activity. A one-way design with repeated measures was used. The between group factor, utilization training treatment, involved achievement comparisons between classes whose teachers had utilization training and those who had not. The within subject factor, time, involved comparisons of students' pre- and post-test scores. This design allowed testing of three questions:

1. Is there an overall achievement difference (both pre- and post-test scores included) between students whose teachers have had utilization training and those who have not?
2. Is there a difference between subjects' pre- and post-test scores?
3. Is there an interaction between the utilization training and time factors?

Results of the analysis showed that there was no interaction effect ($F = 3.14$, $df\ 1/153$, $p < .08$) or main effect for utilization training ($F = .42$, $df\ 1/153$, $p < .52$). There was, however, a significant difference between students' pre- and post-test scores ($F = 203.3$, $df\ 1/153$, $p < .0001$). Post-test scores were higher than pre-test scores, indicating that the telelesson package had a definite impact on student learning.

DISCUSSION

Results of this study showed that the telelesson package for the four safety programs developed by the Nebraska Department of Education had a highly significant impact on student learning ($p < .0001$). This result was obtained by comparing students' pre- and post-test scores. It is important to point out that student increases from pre- to post-testing held regardless of whether or not the teacher had received in-service training and regardless of the number of follow-up activities used. Students whose teachers had not participated in in-service training still made significant achievement gains. Likewise, scores of students under teachers who had used few support activities also increased from pre to post.

This finding is in line with previous research showing that children do learn from instructional television. This fact has been demonstrated in hundreds of studies conducted in a variety of settings and with a variety of curriculums. Several authors have reviewed this research (Chu and Schramm, 1967; Jamison, *et al.*, 1974; Moldstad, 1974), all concluding that children can learn efficiently from this medium.

While viewing the television program and participating in teacher-planned pre- and post-test activities increased student learning, there was a trend towards greater achievement gains with the addition of teacher utilization training. Classes whose teachers participated in the in-service sessions scores higher on the instruction-based test than classes whose teachers had not had such training. The fact that this difference closely approached statistical significance ($p = .052$) points to the impact of utilization training. An examination of the types of utilization activities used by control and experimental teachers revealed several differences. Although all teachers were provided with teacher manuals, the experimental teachers made greater use of this print resource. Experimental teachers more often prepared their students for television viewing and followed up the program with support activities. Post-program discussions were generally longer in experimental

classes. While control teachers tended to concentrate utilization solely on post-program discussions, experimental teachers used a variety of support activities, drawing upon suggestions from the teacher's manual, the in-service workshop, and planning activities of their own. No control teacher used additional media resources, while experimental teachers used leaflets, posters, and film to provide further learning experiences for their students.

The experimental group conducted 60% more utilization activities than the control group. The statistical comparison of the number of activities used by the two groups was insignificant, however. Even though there was a large difference, the small number of subjects ($N = 8$) made significance difficult to achieve.

The sheer number of utilization activities conducted does not appear to be related to student achievement. Classes were ranked according to the number of teacher-led activities used, and the top and bottom three classes were identified. A comparison of high-teacher utilization activity classes versus low activity classes showed no significant student achievement difference between the two groups. It should be pointed out, however, that the number of activities conducted is not necessarily indicative of quality utilization. Differences in the nature of activities used by the experimental versus the control teachers suggests that higher quality utilization was promoted by the in-service training. Using this quality versus quantity distinction, this study suggests that quality utilization is more likely to impact on student achievement.

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APPENDIX A:

TABLE OF SPECIFICATIONS FOR STUDENT TEST

TABLE OF SPECIFICATIONS: STUDENT TEST

<u>Program</u>	<u>Knowledge</u>		<u>Comprehension</u>		<u>Application</u>		<u>Total</u>	
	No. Questions	Points	No Questions	Points	No. Questions	Points	No. Questions	Points
TAKING CARE OF YOU	6	15	1	2			8	17
FIRE	5	10	1	4	1	2	7	16
FUN IN THE SUN	4	9	2	4			5	13
HOME HEALTH HAZARDS	1	2	1	6	3	6	5	14
TOTAL	16	36	5	16	4	8	25	60

APPENDIX B
STUDENT TEST

Name: _____

Teacher: _____

SAFETY QUIZ

1. Where is the safest place to swim?

- ☐ A. A ditch
- ☐ B. A lake with a life guard
- ☐ C. An open creek
- ☐ D. A swimming pool without a guard

2. There is a fire in your house. You touch the door in your room and it is hot. What should you do?

- ☐ A. Wrap yourself in blankets
- ☐ B. Get the door open and get out of the house
- ☐ C. Find another way out of the house
- ☐ D. Use blankets to fight the fire

3. You are riding your bike home from a friend's house. You are late for dinner. What should you do?

- ☐ A. Take shortcuts down the sidewalk
- ☐ B. Take a busy street because it is faster
- ☐ C. Ride carefully at normal speed
- ☐ D. Ride fast to make up time

4. Which of these accidents could you take care of yourself -- without any help?

- ☐ A. Black eye
- ☐ B. Sprained ankle
- ☐ C. Bad cut
- ☐ D. Skinned knee

5. Why should a family have a first aid kit?

- ☐ A. Someone might start a fire
- ☐ B. Someone might get hurt
- ☐ C. Someone might not know first aid
- ☐ D. You should keep drugs away from little brothers and sisters

6. Name 5 items you need in a first aid kit.

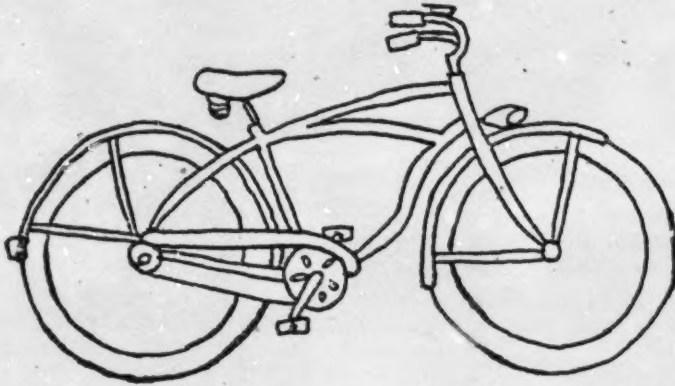
- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

7. You should be careful when you use a hair dryer around water. Why?
- ☐ A. You might drop the dryer in the water and ruin it
 - ☐ B. You might get an electric shock
 - ☐ C. The hair dryer might catch on fire and burn you
 - ☐ D. Electric hair dryers do not work well around water
8. Joe's baby sister has drunk some poison. He is the only person home. What should he do?
- ☐ A. Have her lie down and keep quiet
 - ☐ B. Try to make her throw up the poison
 - ☐ C. Call for help
 - ☐ D. Have her drink water
9. Mary has cut her hand and is bleeding badly. You are the only person there. What should you do?
- ☐ A. Run for help
 - ☐ B. Go to a phone and dial 0
 - ☐ C. Press on the cut with your hand
 - ☐ D. Cover Mary with a blanket
10. Sandy and Mary are riding their bikes. Sandy hits a bump and falls into the street. She cannot move. What should Mary do?
- ☐ A. Try to move Sandy out of the street
 - ☐ B. Stay with Sandy until help comes
 - ☐ C. Leave Sandy and get help
 - ☐ D. Have Sandy sit up
11. A lake can be an unsafe place to swim. Why?
- ☐ A. The water is not pure
 - ☐ B. The bottom may be muddy
 - ☐ C. You can't tell how deep it is
 - ☐ D. The water is cold
12. What are 2 things you can do to prevent fires at home?
- 1. _____
 - 2. _____
13. There is a fire in your house. The house is full of smoke. What should you do?
- ☐ A. Get down on the floor and crawl out of the house
 - ☐ B. Open all the windows and doors
 - ☐ C. Turn on all the water faucets
 - ☐ D. Put blankets against the doors

14. Grease in a pan catches on fire. What should you do?
- ☐ A. Throw water on the flame
 - ☐ B. Take the pan outside
 - ☐ C. Cover the pan with a lid
 - ☐ D. Don't do anything. The fire will burn out.
15. Why is a split electric lamp cord not safe?
- ☐ A. The wires might touch and cause a fire
 - ☐ B. The wires will get hot
 - ☐ C. The cord might break in two
 - ☐ D. The lamp won't work
16. What is the number you call to get help when someone is hurt or when there is a fire?
- _____
17. You should never stand in a wet place when changing a light bulb. Why?
- ☐ A. You might slip and break the bulb
 - ☐ B. You might get an electric shock
 - ☐ C. You might put the bulb in wrong
18. Bob smells gas from the kitchen stove. What should he do?
- ☐ A. Light the stove with a match
 - ☐ B. Close the doors and windows
 - ☐ C. Turn off the gas valve
 - ☐ D. Throw water on the stove
19. Name 3 things in your home that might cause accidents and fires.
1. _____
2. _____
3. _____
20. Laura is taking care of her baby sister. Her mother has gone to the store. Her sister burns her hand on the stove. What should Laura do?
- ☐ A. Pour water on her sister's hand
 - ☐ B. Put alcohol on her sister's hand
 - ☐ C. Wrap her sister's hand in a bandage and call for help
 - ☐ D. Laura should do nothing until her mother comes home
21. Bill and his friends are at the beach. Bill cuts his foot on a can. What should he do?
- ☐ A. Run for help
 - ☐ B. Press his towel on the cut
 - ☐ C. Put his foot in the water
 - ☐ D. Bill should do nothing

22. Jane has a plastic bag from the cleaners. Her baby sister wants to play with it. Jane should not give it to her. Why?

- ☐ A. She might tear it apart and make a mess
- ☐ B. She might put it over her head and not be able to breathe
- ☐ C. She might get tied up in it
- ☐ D. She might throw it away



23. Name 3 parts of the bicycle that need regular care.

- 1. _____
- 2. _____
- 3. _____

24. Jane is riding her bike. She comes to a corner at the same time as Mrs. Jones, who is walking. Who has the right of way?

- ☐ A. Jane
- ☐ B. Mrs. Jones

25. What does this signal mean?



- ☐ A. The person is going to turn left
- ☐ B. The person is going to turn right
- ☐ C. The person is going to stop

Name: _____

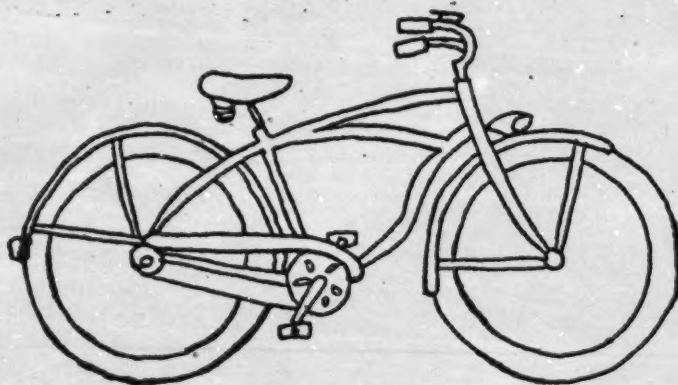
Teacher: _____

SAFETY QUIZ

1. What is the number you call to get help when someone is hurt or when there is a fire?

2. Jane is riding her bike. She comes to a corner at the same time as Mrs. Jones, who is walking. Who has the right of way?

- ☐ A. Jane
☐ B. Mrs. Jones



3. Name 3 parts of the bicycle that need regular care.

1. _____
2. _____
3. _____

4. Where is the safest place to swim?

- ☐ A. A ditch
☐ B. A lake with a life guard
☐ C. An open creek
☐ D. A swimming pool without a guard

5. Which of these accidents could you take care of yourself -- without any help?

- ☐ A. Black eye
☐ B. Sprained ankle
☐ C. Bad cut
☐ D. Skinned knee

6. There is a fire in your house. The house is full of smoke. What should you do?
- ☐ A. Get down on the floor and crawl out of the house
 - ☐ B. Open all the windows and doors
 - ☐ C. Turn on all the water faucets
 - ☐ D. Put blankets against the doors
7. You should be careful when you use a hair dryer around water. Why?
- ☐ A. You might drop the dryer in the water and ruin it
 - ☐ B. You might get an electric shock
 - ☐ C. The hair dryer might catch on fire and burn you
 - ☐ D. Electric hair dryers do not work well around water
8. You are riding your bike home from a friend's house. You are late for dinner. What should you do?
- ☐ A. Take shortcuts down the sidewalk
 - ☐ B. Take a busy street because it is faster
 - ☐ C. Ride carefully at normal speed
 - ☐ D. Ride fast to make up time
9. Laura is taking care of her baby sister. Her mother has gone to the store. Her sister burns her hand on the stove. What should Laura do?
- ☐ A. Pour water on her sister's hand
 - ☐ B. Put alcohol on her sister's hand
 - ☐ C. Wrap her sister's hand in a bandage and call for help
 - ☐ D. Laura should do nothing until her mother comes home
10. Bill and his friends are at the beach. Bill cuts his foot on a can. What should he do?
- ☐ A. Run for help
 - ☐ B. Press his towel on the cut
 - ☐ C. Put his foot in the water
 - ☐ D. Bill should do nothing
11. Sandy and Mary are riding their bikes. Sandy hits a bump and falls into the street. She cannot move. What should Mary do?
- ☐ A. Try to move Sandy out of the street
 - ☐ B. Stay with Sandy until help comes
 - ☐ C. Leave Sandy and get help
 - ☐ D. Have Sandy sit up
12. Why should a family have a first aid kit?
- ☐ A. Someone might start a fire
 - ☐ B. Someone might get hurt
 - ☐ C. Someone might not know first aid
 - ☐ D. You should keep drugs away from little brothers and sisters

13. Name 5 items you need in a first aid kit.

1. _____
2. _____
3. _____
4. _____
5. _____

14. A lake can be an unsafe place to swim. Why?

- ☐ A. The water is not pure
- ☐ B. The bottom may be muddy
- ☐ C. You can't tell how deep it is
- ☐ D. The water is cold

15. There is a fire in your house. You touch the door in your room and it is hot. What should you do?

- ☐ A. Wrap yourself in blankets
- ☐ B. Get the door open and get out of the house
- ☐ C. Find another way out of the house
- ☐ D. Use blankets to fight the fire

16. Joe's baby sister has drunk some poison. He is the only person home. What should he do?

- ☐ A. Have her lie down and keep quiet
- ☐ B. Try to make her throw up the poison
- ☐ C. Call for help
- ☐ D. Have her drink water

17. Mary has cut her hand and is bleeding badly. You are the only person there. What should you do?

- ☐ A. Run for help
- ☐ B. Go to a phone and dial 0
- ☐ C. Press on the cut with your hand
- ☐ D. Cover Mary with a blanket

18. Name 3 things in your home that might cause accidents and fires.

1. _____
2. _____
3. _____

19. Jane has a plastic bag from the cleaners. Her baby sister wants to play with it. Jane should not give it to her. Why?

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20. Bob smells gas from the kitchen stove. What should he do?

- ☐ A. Light the stove with a match
- ☐ B. Close the doors and windows
- ☐ C. Turn off the gas valve
- ☐ D. Throw water on the stove

21. You should never stand in a wet place when changing a light bulb. Why?

- ☐ A. You might slip and break the bulb
- ☐ B. You might get an electric shock
- ☐ C. You might put the bulb in wrong

22. Grease in a pan catches on fire. What should you do?

- ☐ A. Throw water on the flame
- ☐ B. Take the pan outside
- ☐ C. Cover the pan with a lid
- ☐ D. Don't do anything. The fire will burn out

23. Why is a split electric lamp cord not safe?

- ☐ A. The wires might touch and cause a fire
- ☐ B. The wires will get hot
- ☐ C. The cord might break in two
- ☐ D. The lamp won't work

24. What does this signal mean?



- ☐ A. The person is going to turn left
- ☐ B. The person is going to turn right
- ☐ C. The person is going to stop

25. What are 2 things you can do to prevent fires at home?

1. _____
2. _____

APPENDIX C
TEACHER QUESTIONNAIRE

School _____

TV SAFETY PROGRAMS UTILIZATION QUESTIONNAIRE

Results		
Control	Exp.	
		1. How many years have you been teaching?
3	3	2. What degrees have you earned?
1	1	Bachelor's
		Master's
		Other (Please specify: _____)
		3. Have you used television in your classroom in the past?
4	4	Yes
0	0	No
		4. If yes, how many different television programs does your class view during the average week?
1	0	Less than one per week
3	4	2 - 3
0	0	4 - 5
0	0	6 or more
		5. Did you use any of the four safety television programs last year?
0	2	Yes
4	2	No
		6. Which of these safety programs did your students view during April?
		_____ TAKING CARE OF YOU
		_____ FIRE -- BE PREPARED
		_____ HOME HEALTH HAZARDS
		_____ FUN IN THE SUN
		7. Did you use the teacher's manual to help in planning these lessons?
1	4	Yes
3	0	No
		8. Did you generally prepare the students for the programs before viewing?
3	4	Yes
1	0	No
		9. Did you generally discuss the programs with your students after viewing?
4	4	Yes
0	0	No
		If discussions were held, approximately how long did they last?
2	0	0 - 5 minutes
2	2	5 - 15 minutes
0	2	15 - 30 minutes
0	0	over 30 minutes
		10. Did you generally follow-up the lessons with support activities?
1	4	Yes
3	0	No

Control	Exp.	
		11. How much time did you spend on the average in planning the lesson?
3	2	Less than 30 minutes
1	2	30 minutes - one hour
0	0	1 hour - 2 hours
		Over 2 hours
		12. Did you conduct any of the following activities with your class? Please mark the activities used.
		<u>Program: TAKING CARE OF YOU</u>
0	1	1. Make a bulletin board display of emergency conditions and procedures.
1	1	2. Have children role play people's responsibilities in various emergency conditions.
2	4	3. Review procedures in cleaning and bandaging a cut or skinned knee.
0	1	4. Have children practice applying bandages to minor cuts.
0	0	5. Have children decorate box to show it is family first aid kit.
2	4	6. Encourage children to put together family first aid kit.
1	3	7. Have children develop list of articles needed for family first aid kit.
2	2	8. Review and discuss what to do when someone is bleeding and when someone has fallen and cannot move.
3	4	9. Review dialing 911 for help and what information to give.
0	2	10. Have children make first aid posters.
4	4	11. Conduct follow-up program discussions.
3	4	If discussions were held, what topics were discussed?
4	3	first aid kit
4	2	what to do in accident situations
1	1	dialing 911
		other (please describe)
Natural disasters		Fire safety at school
		12. Did you use any additional media resources?
0	1	Yes
4	3	No
		If yes, please describe:
		ESU Film

Control	Exp.	
		13. Did you conduct any other activities?
2	2	Yes
2	2	No
		If yes, please describe:
1. First aid presentation by 4th grader.	1. Used fantasy ideas from workshop.	
	2. Had nurse show first aid kit.	
	3. Kids wrote letter to parents telling importance of first aid kit.	
2. Riding in a car safety.		
		<u>Program: FIRE -- BE PREPARED</u>
0	1	1. Make posters illustrating general fire rules.
1	1	2. Have students draw home floor plans and describe fire exit procedures.
1	1	3. Have children dramatize what to do in various fire situations.
3	3	4. Conduct follow-up program discussions.
3	3	If discussions were held, what topics were discussed?
1	3	Hazardous fire situations at home
3	3	Preventing and controlling fires
0	0	Procedures to follow in case of fire at home
		Other (Please specify)
		5. Did you use any additional media resources?
0	0	Yes
4	4	No
		If yes, please describe:
		6. Did you conduct any other activities?
0	2	Yes
4	2	No
		If yes, please describe:
		1. Discussed with parents what to do at home if fire occurred.
		2. Wrote story about fire safety - did picture to go with it.
		3. Drew my home on overhead and discussed.
		<u>Program: HOME HEALTH HAZARDS</u>
1	3	1. Have children make list of actual or potential hazards in the home.
0	1	2. Have children role play hazardous home situations and present prevention or control procedure.
2	3	3. Conduct a follow-up program discussion.
2	3	If discussions were held, what topics were discussed?
		Actual or potential hazards in student's home

Control	Exp.	
1	3	Methods to prevent or control home health hazards
0	0	Other (Please specify)
0	0	4. Did you use any additional media resources?
4	4	Yes
		No
		If yes, please describe:
0	1	5. Did you conduct any other activities?
4	3	Yes
		No
		If yes, please describe:
		Kids did pictures of home hazards.
		<u>Program: FUN IN THE SUN</u>
0	0	1. Make bulletin board displays or posters illustrating water safety practices.
1	1	2. Have children dramatize hazardous water or cycling situations and describe how problem could be corrected or avoided.
0	0	3. Have members of the local police department explain rules and regulations concerning equipment and operation of bicycle.
0	0	4. Have bicycle inspection to determine proper equipment.
0	0	5. Plan a "bicycle rodeo."
1		6. Have children keep record of bicycle accidents and discuss how they could be prevented.
0	1	7. Have children role play examples of bicycling behavior under certain conditions of emotionality and lack of skill and knowledge.
3	4	8. Conduct a follow-up program discussion.
2	3	If discussions were held, what topics were discussed?
3	3	Rules and practices of swimming safety
2	2	Rules and practices of bicycle safety
2	0	Examples of hazardous situations that can be encountered while swimming and cycling
		How attitudes, emotions, and lack of skills and knowledge may contribute to accidents while cycling or around the water
		Other (Please specify)
0	3	9. Did you use any additional media resources?
4	1	Yes
		No
		If yes, please describe:
		1. Used bicycle safety leaflet from Schwinn.
		2. Used bicycle safety poster from Nebraska National Guard.
		3. Students made posters to depict bike rules.

Control	Exp.
---------	------

10. Did you conduct any other activities?

0	3	Yes
4	1	No

If yes, please describe:

Kids practiced bicycle hand signals.

TELEVISION UTILIZATION WORKSHOP EVALUATION

Average Ratings

1. How valuable were the workshop sessions in helping you plan for using these lessons in your class?

_____ Very valuable
 _____ Valuable
 _____ So - so
 _____ Little value
 _____ No value

Average Rating - "Valuable"

2. Please rate the following elements of the utilization workshop. Circle the number that best represents your feelings.

VISUAL LITERACY IDEAS:

1 2 3 4 5
Very valuable No value

"FANTASY" IDEAS:

1 1.5 2 3 4 5
 Very valuable No value

BASIC UTILIZATION IDEAS:

1 2 3 4 5
Very valuable No value

PROJECT INFORMATION:

1 2 3 4 5
Very valuable No value

GROUP INPUT ELEMENT:

1	2	3	4	5
Very valuable	2.25			No value

PROGRAM PREVIEWS:

V _____ 1 2 3 4 5
Very valuable No value

3. Was there any topic not covered during the workshop that would have helped you in using these TV lessons? Please specify: